



Winnebago Landfill Company, LLC

5450 Wansford Way, Suite 201 • Rockford, IL 61109 • Tel: (815) 963-7516 • Fax: (815) 381-5647

November 2, 2010



Mr. Joseph Ulfig, P.E.
Air and Radiation Division
Mail Code AE-17J
US Environmental Protection Agency-Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Re: Winnebago Landfill – NOV/FOV EPA-5-10-07-IL
Supplemental Information To Be Submitted In Follow-up To October 5th Meeting

Dear Mr. Ulfig:

On behalf of Winnebago Reclamation Service (“WRS”), we appreciated the recent opportunity to meet with you and the other US Environmental Protection Agency (“USEPA”) officials. I feel that we made good progress toward a final resolution of the above-referenced NOV. As we discussed, WRS has identified in this letter the additional information requested by USEPA that will be developed and provided in a separate followup submittal.

The following is a summary of the additional information and/or categories of information that WRS will be developing to address USEPA’s questions. We anticipate it will be provided within the next two weeks:

- **Methane Surface Scans** – In compliance with the NSPS, WRS conducts quarterly surface testing across the surface of the landfill to verify proper operation of its landfill gas collection system. USEPA has requested that WRS perform a surface scan using a methodology that is similar to what is required by the NSPS to identify potential “gaps” in the landfill gas (lfg) well spacing design of the South Unit. WRS will prepare a design plan with a sampling grid for a supplemental surface scanning program at the South Unit consistent with USEPA’s suggestions. The sampling plan will be conducted in the area(s) within the South Unit which were identified by USEPA as possibly lacking sufficient lfg well density. The goal is to verify whether or not there is a need for additional lfg collection wells in those areas.

- **Landfill Gas Collection System for North Expansion Unit** – During our meeting, WRS provided a summary of ongoing and completed work to manage lfg during the operation of the North Expansion Unit of the Winnebago Landfill Facility. WRS typically utilizes a system of horizontal collection piping and vertical gas collection wells during the operating period of a disposal unit. A typical lfg management plan for WRS is to utilize horizontal collection wells in areas that have not reached the final design grades and installation of vertical wells in areas that have reached final design elevations. Both the horizontal and vertical lfg collection wells are connected to a temporary header piping system that is utilized during the landfill operational life. The first tier of horizontal collection wells was installed in the Phase I and II portions of the North Expansion Unit during the summer of 2009. Additional vertical wells were installed during the late winter of 2010 and plans are currently being finalized to install additional horizontal piping in the Phase III and IV areas of the North Expansion Unit.

Under the applicable requirements of the NSPS, WRS would not be required to collect gas from the Northern Expansion Unit until 2013. As a way to reduce the potential for odor emissions from the landfill, however, WRS has moved forward with plans to collect landfill gas from those areas of the Northern Expansion Unit where collection is feasible. In the followup submittal, WRS will provide a summary of the actions it has already completed and those planned for the future to collect landfill gas from the Northern Expansion Unit.

- **Plans to Minimize Disposal of Pulverized Drywall**–During our recent meeting, WRS summarized the screening process that is currently being used by WRS to minimize the amount of pulverized drywall that will be accepted at the Winnebago Landfill. Those actions started back in 2009 when WRS advised certain operators of construction and demolition (C&D) debris recycling operations that it would no longer accept material from those facilities unless the drywall was removed prior to being processed for recycling .

WRS is also in the process of developing a screening protocol to identify material brought to the landfill that has characteristics that will result in production of excessive hydrogen sulfide within the landfill. Currently, a grab sample (approximately five gallons) is taken daily from at least one truck for each generator of recycled C & D residue that is delivered to the landfill. Multiple samples are grabbed on a daily basis and at least one sample is randomly sampled from each day to be analyzed for total sulfur and leachable sulfate. The results of the screening tests will be used to reject generators that are not removing drywall prior to processing. WRS makes follow-up contact with the waste generator to advise them that pulverized drywall or other high sulfur-containing waste cannot be accepted at the Winnebago Landfill. Additionally, WRS has hired a contractor to audit C&D debris recycling operations for the primary purpose of determining where the drywall waste is being disposed of.

As noted during our meeting discussions, these are preliminary actions intended to reduce the amount of pulverized drywall that enters the Winnebago Landfill. However, there are no applicable regulations, guidelines or standards for determining what constitutes an appropriate level of sulfur content for solid waste landfills. In our follow-up submittal, WRS will provide USEPA with additional information regarding our efforts to minimize the amount of pulverized drywall and other high sulfur C&D debris that is accepted at the Winnebago Landfill.

- **Landfill Gas Collection Well Inspections and “Best Practices”**– USEPA raised a concern about our landfill gas collection wells becoming “watered in” due to the reduced collection efficiency of a saturated lfg well. WRS has conducted inspections of its landfill gas collection system which includes checking for water intrusion in the landfill gas collection well. However, WRS does not have a written plan for regular inspection of wells to specifically monitor water levels as a method to identify “watered in” wells. WRS has typically relied on other well characteristics such as poor methane concentration, high O₂ and high nitrogen as an indicator of potential problems such as well saturation or damage. In our supplemental information, WRS will propose “best practices” for routine inspections and maintenance to minimize the potential for “watered in” landfill gas collection wells.
- **Flare Relocation Design and Operations** – USEPA has requested additional information regarding WRS’ plans for relocation of the existing flares to a new location that is adjacent to the Winnebago Energy Center. In our July 23rd submittal to USEPA (of supplemental information requested during our July 8th meeting), WRS provided a summary of our plans to (1) relocate the flares to the area immediately north of the Winnebago Energy Center; and (2) retrofit the flare control system to provide for automatic startup to minimize gas collection downtime. At your request, WRS will provide more detailed information regarding the flare relocation plans and the automated system for starting the flare. If available, we can provide a copy of the Construction Permit issued by the Illinois EPA for the flare relocation project.

Accelerated Final Closure Schedule for South Unit–Although the South Unit is still an active disposal unit within the Winnebago Landfill Facility, WRS has completed a portion the final closure and capping of this unit. Our focus for accelerated closure during the planning process for the 2010 construction season was to complete closure and install the final cap on that portion of the South Unit where the bulk amount of drywall fines were disposed.

Some actions taken to minimize the potential for fugitive gas leaks from the South Unit, i.e. sealing the boots around certain gas collection wells and placement of the protective soil layer, will need to be redone due to settling of the landfill during final closure activities. During a typical final cover installation the well boots will not be sealed until after the protective soil layer is placed to avoid damage due to settlement caused by the weight of the protective soil layer and vehicle traffic. While WRS anticipated this issue, it went ahead and sealed the

well boots at the recommendation of the Illinois EPA and its consultant, Dr. Bill Franek. In its follow-up submittal, WRS will identify for the USEPA those areas which have been closed and are awaiting acceptance of the closure report and the remaining area which will be closed in 2011.

WRS would also like to document our discussions regarding WRS' compliance with the SO₂ concentration limit of 35 Ill. Admin. Code 214.301. Based on our meeting discussions, we understand that USEPA does not plan to move forward with its allegation that WRS is operating its flares in violation of Section 214.301. In previous meetings and submittals to the USEPA, WRS provided detailed combustion calculations and supplemental information in support of its position that operation of the flares fully complies with Section 214.301. It is our understanding that the USEPA has determined that it will not pursue that aspect of its enforcement case.

WRS concurs with USEPA officials that the primary focus should be on identifying odor mitigation measures that could be implemented at the Winnebago Landfill to further reduce objectionable odors. The information to be provided in our follow-up submittal is intended to engage USEPA officials in a coordinated effort with WRS and Illinois EPA personnel to resolve concerns about objectionable odors from the landfill.

If there is any additional information that USEPA would like to see in our next submittal, or if I have misstated or misunderstood any of the agreements reached during our recent meeting, please contact me immediately.

Sincerely,

A handwritten signature in black ink, appearing to read 'THH', with a long, sweeping horizontal line extending to the right.

Thomas Hilbert

cc: T. Jagielski, William Charles
J. Pinion, R. K. & Associates
J. Varsho, Shaw Environmental
J. Faletto, Hinshaw & Culbertson